The Workshop.

A Monthly Journal, devoted to Progress of the Useful Arts

EDITED BY

PROF. W. BAUMER, I. SCHNORR AND OTHERS.

VOL. I. No. 11.

CRYSTAL MANUFACTURE AND JEWELLERY.*

These creations are certainly on the very verge of legitimate licence and good taste in Art; still the display of a highly accomplished workmanship atones, to a certain degree, for the deficiency in a purely æsthetic point of view, and the non-conformity of purpose. For with an admirable precision and finish, every feather, and the most minute details, are cut out of the hard material, and wrought with handsome gold mountings. This incongruity in form and purpose may partly at least be accounted for by its having a precedent in the Antique, where heads of animals, etc., were also used for drinking vessels; but the fact that only very few specimens of this kind are preserved entire in our modern art-collections, the wings especially which were affixed to the lid being generally broken off, shows how very injudicious in conception and inappropriate for use these productions were.

Still more objectionable than these are certainly representations of other animal types, such as elephants, etc., carrying an enamelled tower on their backs, used for inkstands, or other fancy-articles, e. g., ships in full sailing tackle, made out of the same refractory material. The brothers Sarrachi are pointed out by their contemporaries as particularly skilled in the manufacture of such extravagances. They give a significant hint of the erroneous tendency to which this branch of art is inclined, and how, in its downward course, it may degenerate into mannerism and vagary. Witness the subsequent period, in which the principles of true Art were forsaken, and all fitness and beauty of form sacrificed to odd fancy and arbitrary caprice, then at the height of fashion. They mark the decline of crystal-manufacture of that age, soon also to be followed by that of the Fine Arts in Italy.

Nevertheless, with the Uffizi Gallery and the Pitti Palace at Florence, this country is in possession of the most remarkable and beautiful collections of crystals (e. g., Valerio's celebrated casket of Pope Clement VII, etc.); while also France, England, Germany, and Austria have, in their art-collections, stored up immense numbers of rich treasures of this kind. Besides Francis I, already mentioned as having given the impulse for the introduction of this manufacture, it was especially Rodolph II, the highly refined, artistic prince of the house of Habsburg who, by his invitation of Italian goldsmiths and lapidaries to his court at Prague, founded a school for the exercise of these arts in Bohemia.

It is a remarkable incident in the realm of Art, that the Useful Arts, more than others, hold their ground against degeneracy, producing, long after the decline of high Art, Architecture, and Sculpture, works of the former purer stamp. Indeed a certain dogged perseverance is innate to the more inert and sober trade, and it requires some effort to induce it to leave the well-used path for a new track. Its good old ways and customs are a protection against a rapid depravation of taste, and by the mediation of the Useful Arts the transition of styles becomes less abrupt; for they furnish, while other Arts are already launched in a new direction, excellent and even superior works in the old style.

Indeed in this comparatively later period (1576–1612) innumerable works of great perfection were produced which may rank in beauty of composition and finish of workmanship with those of the earlier Italian masters. If works of Italian origin are often superior to others, the reason must be sought in the circumstance that Italian Renaissance in general shows all the fascinating charm and unblemished purity of an original style.

To the collecting mania of Rodolph II Austria owes her great profusion in such works of Art, displayed especially

* See p. 145 *ante*.

in the Vienna *Schatzkammer* and *Antikencabinet*, although many of the most remarkable specimens have found their way into other countries. Not less rich is also the *Ambraser Gallery*, founded by Archduke Ferdinand (ob. 1595), amongst the treasures of which must be mentioned a drinking cup, 18 in. high, which surpasses in magnificence and costliness everything else of the kind. Made for Duke Charles V of Burgundy it is also of great interest on account of its comparatively very early date. The principal feature of its ornamentation consists in the monogram of two C facing each other. Other splendid pieces of this collection are a tazza, with satyrs arranged into handles, and a decanter with enamelled neck with the emblems of the zodiac engraved upon it. Of these and many more objects of inestimable value the rather scanty show in the *histoire du travail* of last year's Paris exhibition could give but a very incomplete idea. *

Most of these productions are of Prague workmanship; still Nuremberg and Augsburg, for a long time the centres of German Industrial Art were both highly renowned for their goldsmiths and crystal manufacturers. However considerable in number and skilled in their art, the names of the artists are now unknown and forgotten; very seldom only, by some good fortune, some one or other is still preserved; thus, a very large vessel, seventeenth century work of the Vienna collection, bears the name of the Italian Tortori.

Still handsome works were furnished during the seventeenth and eighteenth centuries up to which time we can follow the development of this art. But glass-manufacture, which in Bohemia especially was extensively cultivated, could not but supplant crystalcutting; not however without imparting a new character to the former; for in opposition to the Venetian glass-work, where form and finish are due to the art and skill of the glass-blower, the Bohemian process realized these by the grinding and cutting of the glass, thus laying the foundation of the school of Bohemian glasscutters, which is not entirely extinct even now.

The International Exhibitions have given the impulse to very laudable efforts for drawing forth treasures of crystal-manufacture stored up hitherto in museums, and for making use of them in modern glass-manufacture. England especially, guided by solid studies of the Antique and Renaissance, has made astonishing progress in this art.

Nevertheless one great, fundamental error, frequently apparent in recent productions, must be pointed out, which, while mastering the technical difficulties, sets aside the nature and typical character of the material, and offends particularly by the display of color and gilding, and by the employment of opaque glass. Those masterworks of the Renaissance, the crystal vessels of the sixteenth and seventeenth centuries, afford a rich profusion of simple and beautiful motives, by an earnest study of which the regeneration and improvement of this art, of absolute necessity if truth and perfection in a technical as well as purely artistic point of view are to be attained, can ultimately be accomplished.

* The Austrian Museum for Art and Industry has published some magnificent specimens by way of photography. A rich series of very accurate designs of the most remarkable crystals has been prepared during the last few years by the same institute for another intended publication.

II.

These beautiful crystal vessels, just recommended as models for glass-manufacture and pottery, are not less interesting to the goldsmith. Independant of their importance as subjects for direct imitation or better suggestion, he finds in their decoration and mounting the application of the manifold processes of enamelling, precious stones, gilding of different hues, excellent combinations of mat and high polish, and sees all the elements and decorative features of his Art represented which play so prominent a part in modern jewellery.

The necessity of improvement is very obvious in this branch of the goldsmith's art; for nowhere do we meet so much which encroaches on the dictates of common sense and true art as here, where ignorance of the standard principles of style is associated with a melancholy poverty of invention. How vastly different is the tendency of modern taste from that predominant during the age of pure Renaissance! Like the uncivilized, we have rejoiced until lately, nay we do so even now, at the sight of solid masses of brilliant gold, however clumsy in form, in which generally some pearls or precious stones are set without regard to arrangement and elegance of form. The treacherous brilliancy of the gold, so dangerous to true beauty of form, is applied with a lavish hand, instead of being blended or deadened, and seeking the effect more in contrast than in its high polish. Hardly any attempt is made to impart to the object the stamp of Art, by enamel, niello, or engraving. The last great exhibition furnished indeed some successful attempts to introduce enamel work, and although the mode of execution and application is not all that can be desired, we may hail this progress with great satisfaction.

Besides the colored enamel, two other varieties of the same may be discerned to have found their way into modern jewellery. The one is suggested by Eastern Art and is, in its nature and origin, the type of surface-decoration. It is either *champlevé* or *cloisonné*, showing a variety of floral ornament which, bordered by delicate gold-lines, and the magnificent display of colors peculiar to them, produces the most fascinating effect. English and French bronze manufacturers and jewellers already apply Eastern enamel with great success, although subject to the blame of being far too unscrupulous in distinguishing the different periods of style, and too forgetful of the necessary harmony between the decoration of the vessel, and its form.

The chief reason of this is to be sought in the fact that Eastern Art furnishes far too few ornamental motives for the plastic features of the vessel, such as handles, spouts etc., in which it is far behind other styles.

The other chief variety of enamel-work, based on Italian Renaissance on account of its great advantage of commanding an exuberant richness of the pictorial and plastic elements, is restricted in so far as its delicate creations require the execution in precious metals, in order to do justice to the full extent of its beauty. It is acknowledged that the *émail en basse taille* or transparent embossed enamel, highly flourishing during the sixteenth and seventeenth centuries, lent great artistic value to all goldsmith work of that time, and led altogether to the most remarkable productions in this Art. The origin of transparent enamel must be sought in Italy, and according to Vasari's opinion, almost universally admitted, the Silver Altar in Arezzo by Niccola and Giovanni Pisano is supposed to be the first important creation in this style. Florence was soon the most renowned seat of goldsmithery, the records of which begin with the names of such artists as Michael Angelo di Viviano, Cesarino Rosetti, Francesco Salimbene, etc., and which finds its apogee with Cellini, and the Milanese Caradosso.

The manufacture of *émail en basse taille* consists principally in a thin coating of finely moulded relief-work with vitreous colors; both Vasari and Cellini have transmitted the description of this process to us, the latter not without urgent demand for the employment of the graver to the exclusion of the puncheon or hammer. The most brilliant scale of tints, especially deep blue, green and brown is at the disposition of the artist, and being transparent on silverground, they show the most fiery brilliancy. Red demands indeed a layer of gold if it is to produce that gorgeous effect which Cellini requires of his *smalto roggio*. The splendour of this color, the chief element of which is chloride of gold, surpasses everything in beauty, for which reason it was used pre-eminently for enamel ornamentation in the Renaissance period, to which it owes its invention, Antiquity not being acquainted with its preparation. We find light cobalt-blue, white, yellow-green, a rather dull violet and black amongst opaque colors most frequently used. In good productions the very necessary precaution, to coat only small surfaces, zones or lines, is especially observed when translucid vitreous enamel is simultaneously employed.

The share of work allotted to the goldsmith and enameller in the manufacture of these crystal vessels, consists in mounting and connecting the several pieces, but especially in the ornamentation of spout, handle, and foot. Almost always the horizontal mouldings and bands are decorated with opaque enamel, now bead-rolls in gold and blue, now screw-like enrichments in gold on white, or in large dimensions black on gold, being employed.

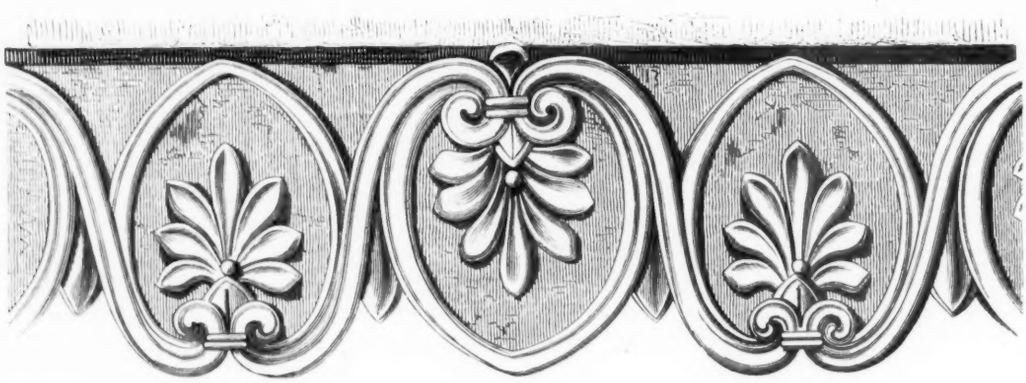
The borders on the circular or elliptical foot of some cups or tazzæ show only translucid vitreous enamel of high brilliancy of color, designed with great artistic taste; thus we see black scroll-work with splendid buds and flowers, interspersed with exotic birds, butterflies, or all sorts of animal types, e. g., grass-hoppers, flies and snails. The brilliant colors in which these fantastic compositions are executed cover, gracefully variegated, the bodies of the animals, which are generally green, and the ground-color slightly hatched or scored, producing the effect of delicate shading or modelling, while the wings, varying in blue and red color, are edged and separated by very thin gold lines, and the beaks and claws remain black. Butterflies receive frequently a deep, magnificent yellow, beautifully contrasting with the dead gold tint. Where there are great flat surfaces to be decorated, the flowing scroll-work is often distributed all over the space, or flowers, mostly pinks, are playfully scattered upon it. But a certain regularity is still observed, as in the lid of a cup of the Florentine collection, which ranks amongst the best specimens of the kind. There even the smallest space, e. g., the small round plates on the inside of the lid and foot of the vessel, serving for the fixture of the connecting screw, are enriched so charmingly in composition and workmanship, that they might directly serve as motives for brooches.

Other decorative features are festoons, wreaths of fruit, and drapery, such as the grotesque taste used to indulge in. To the latter however must be often ascribed uncomely and inappropriate elements such as volutes twisted into a right angle, wrought into highly conventional vegetable ornament.

(The conclusion in our next.)

SPECIMENS OF ORNAMENTATION.

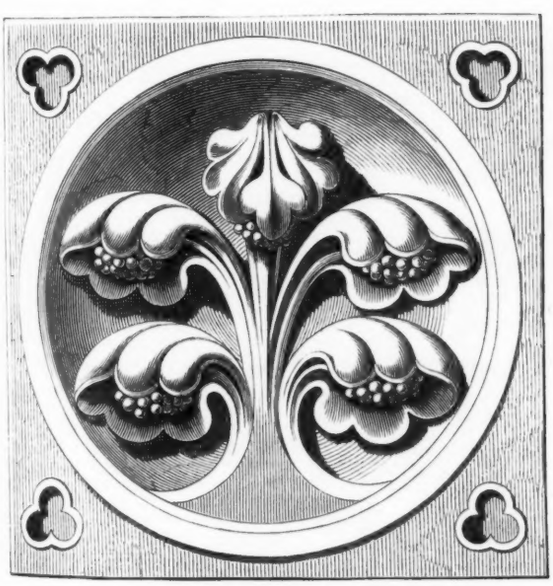
No. 1.



No. 2.

Nos. 1 and 2. Greek style. — Ornaments in Terra-cotta; No. 1 Upright Tiles, surmounting cornice or eaves No. 2 Honey-suckle border.

No. 3.



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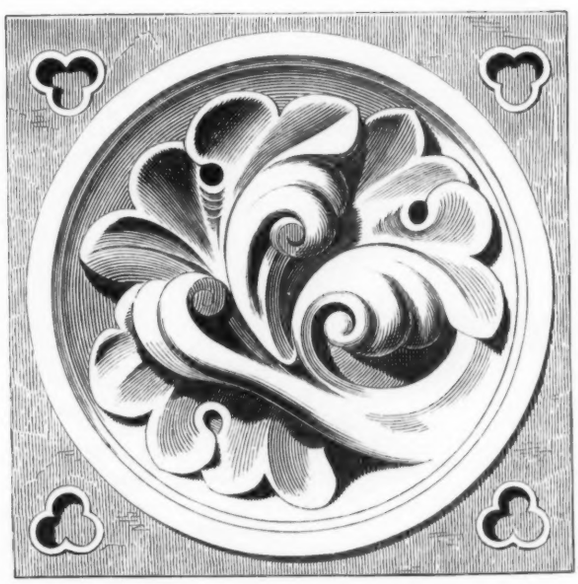
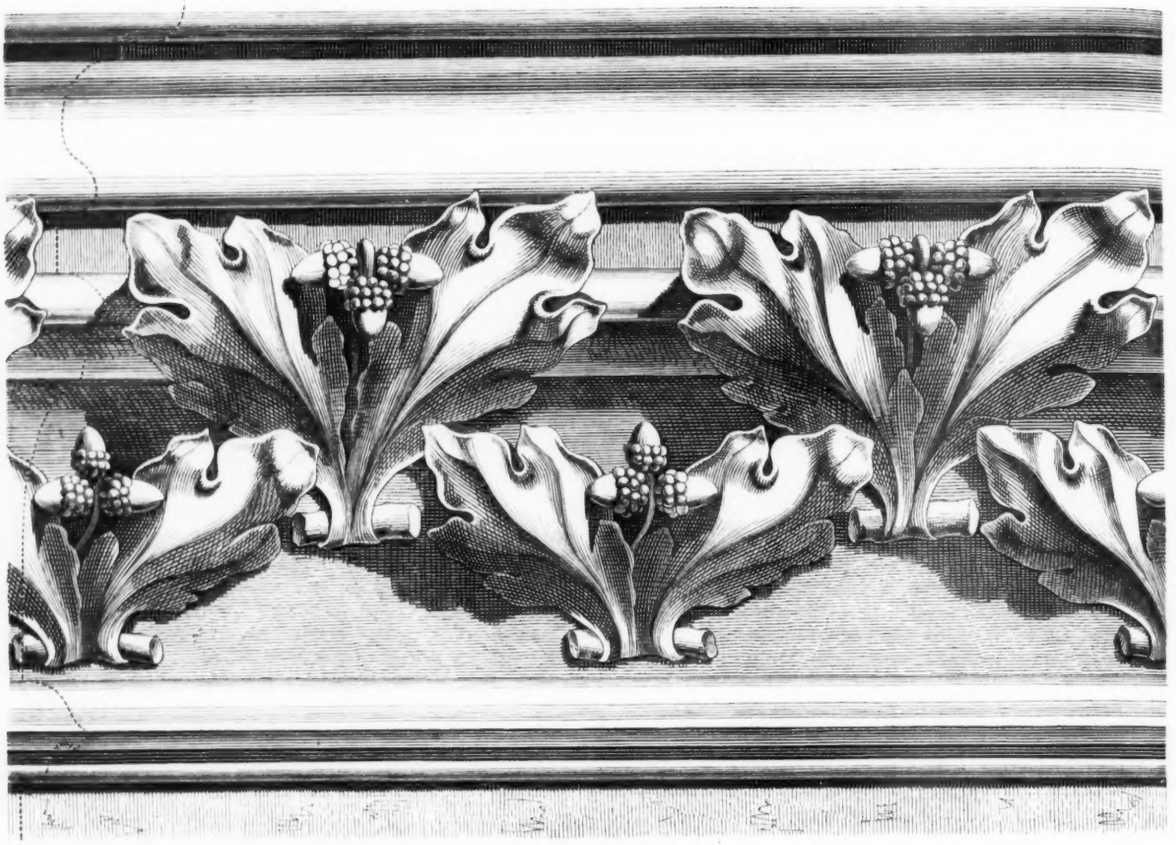


No. 5.

No. 3. Roman Style. — Eagle in marble.

Nos. 4 and 5. Early Gothic. — Carved flowers, from principal entrance of Séez Cathedral (Orne); 13th century.



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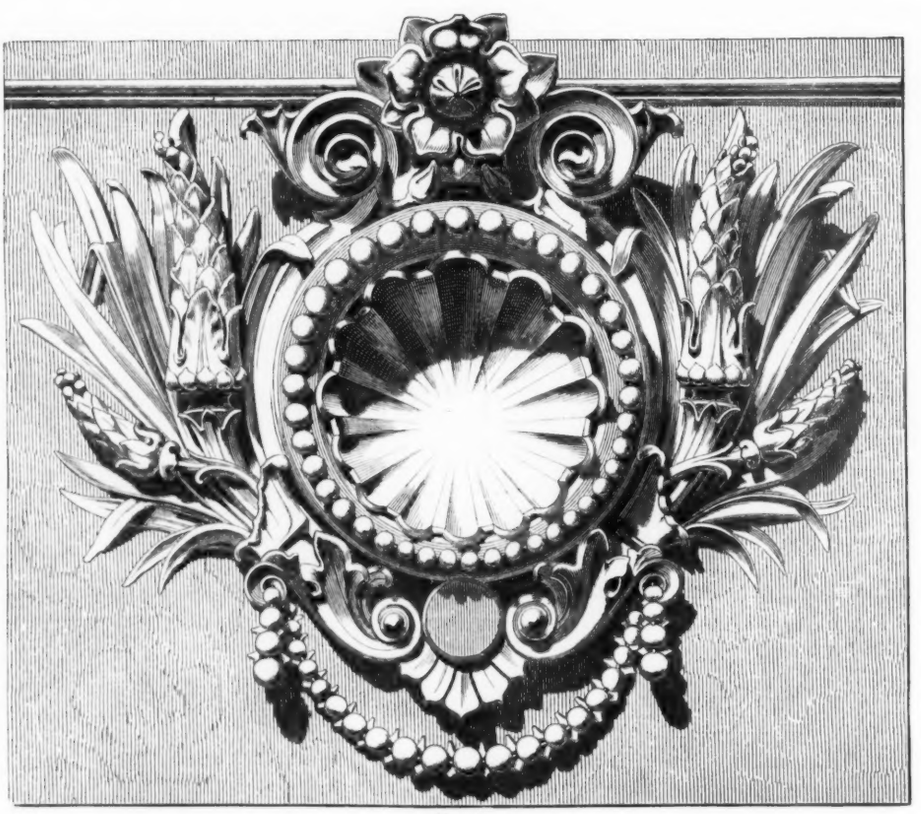


No. 7.

No. 6. Fourteenth Century Gothic. — Detail of stringcourse in the Oratory of Louis XI, Sainte Chapelle, Paris.
No. 7. Back of Gasbrackets, in the passage of the New Opera House, Paris. — M. Ch. Garnier, Archt.

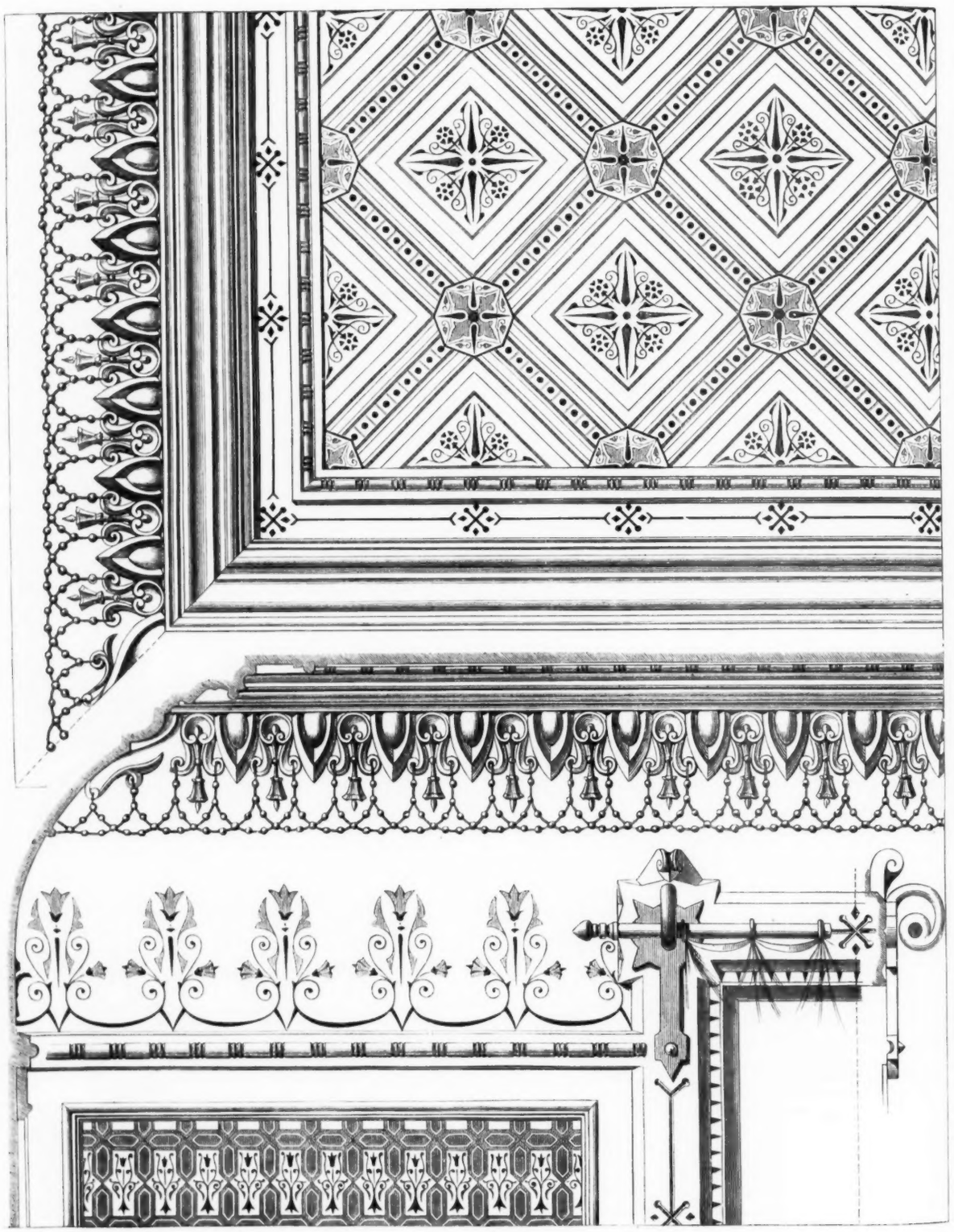
No. 8.

No. 9.

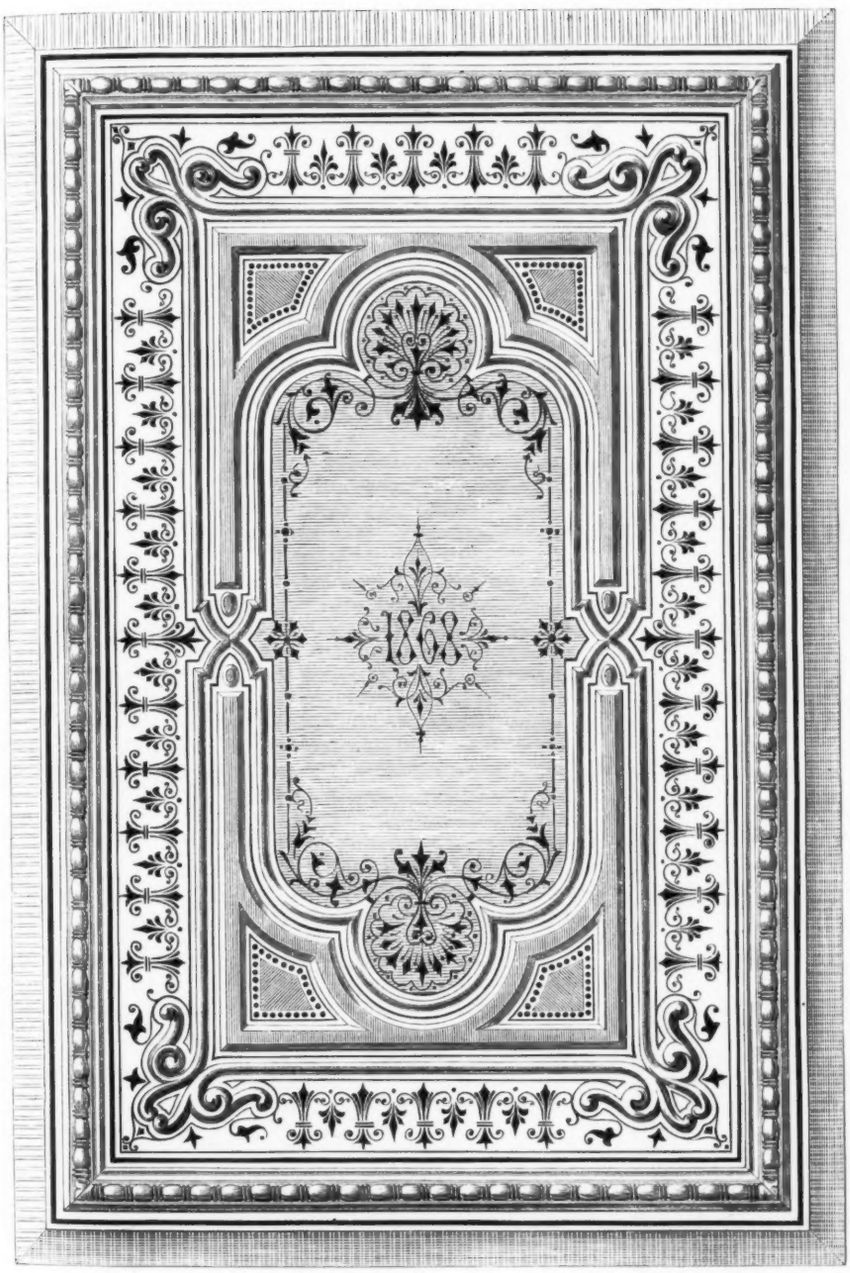
No. 10.

No. 11.

Nos. 8—11. Small Pillar Caps, under springing of arch; No. 9, in imitation of the Rhenish type of Romanesque capitals.



Nos. 12 and 13. Ceiling and Wall Decoration, with door-dressings and hangings. — M. P. Bénard, Archt. Paris.



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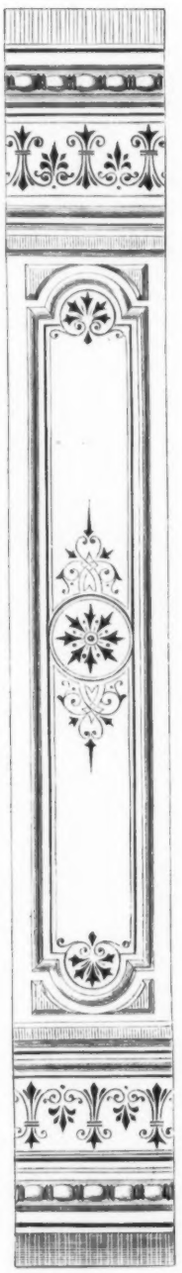
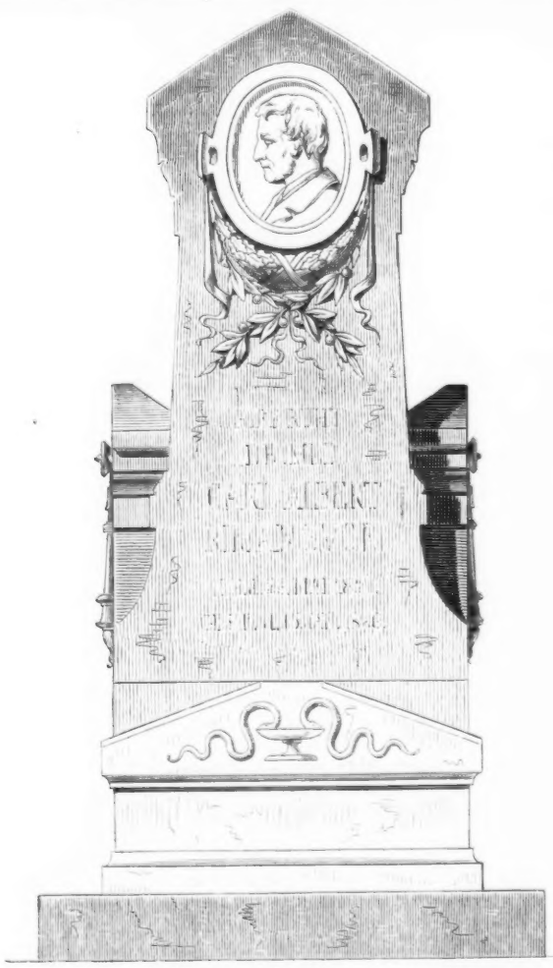


No. 15.

Nos. 14 and 15. Design of Bock-cover. Back and Cover, both simply treated, show mat bead-rolls, the border in gold-relief, the inner framework embossed, the centre *guilloché*. Mr. J. Schnorr, Stuttgart.



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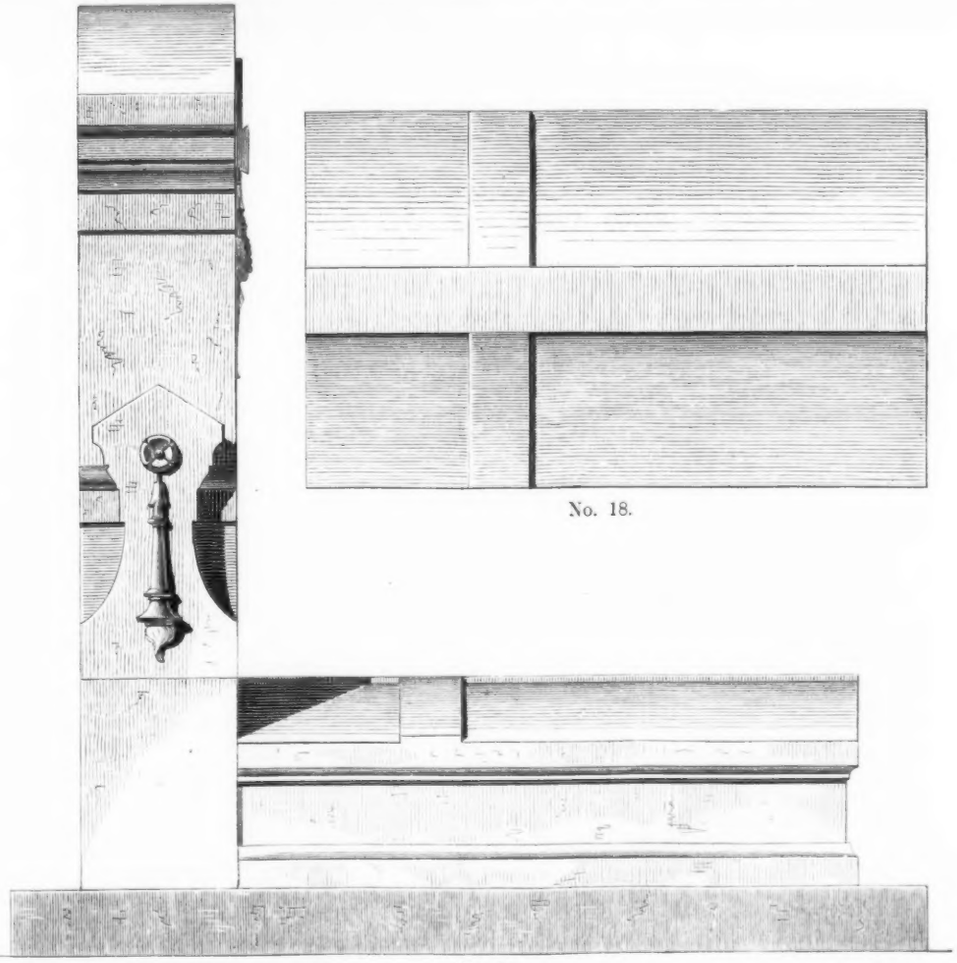
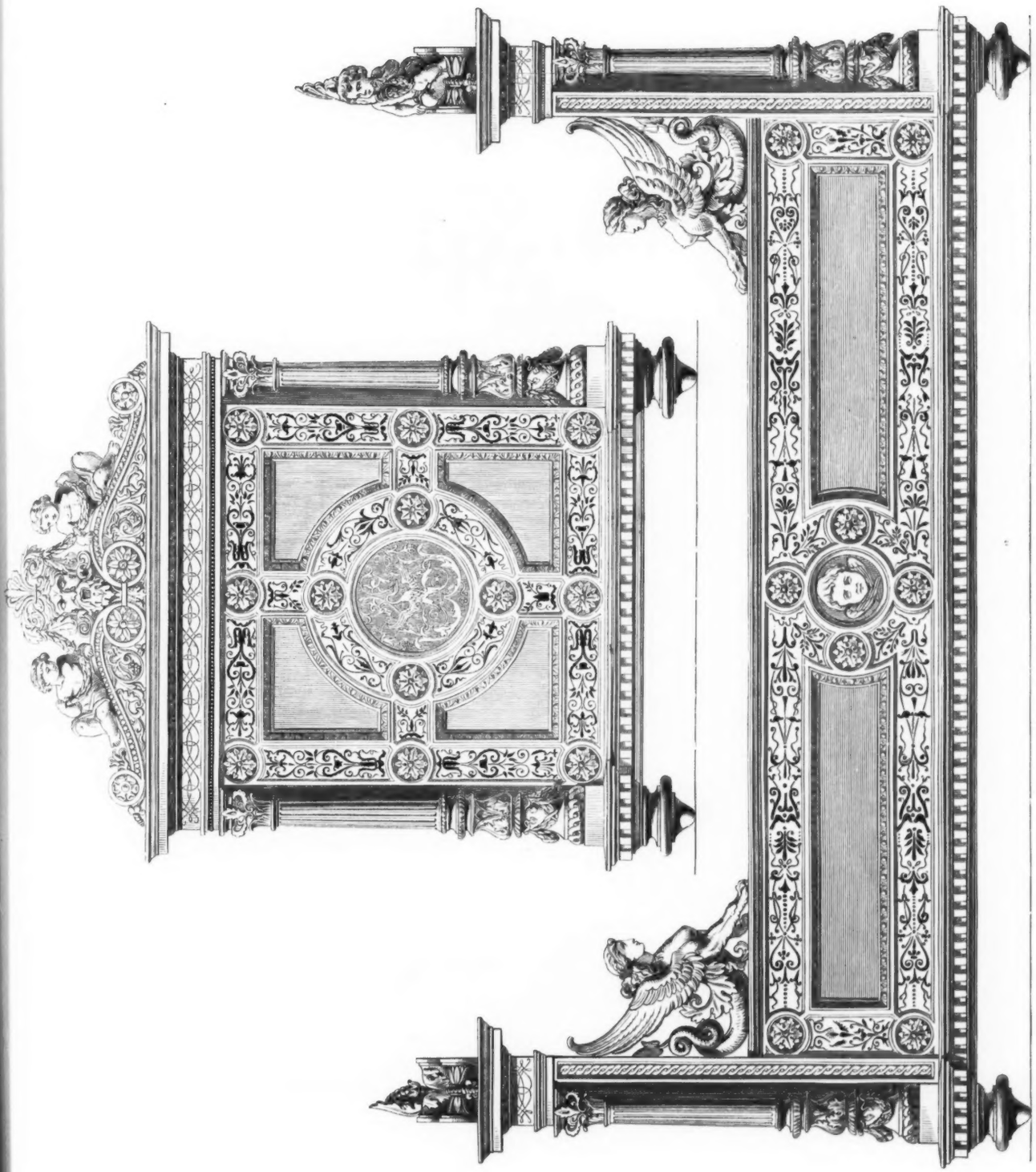


No. 17.

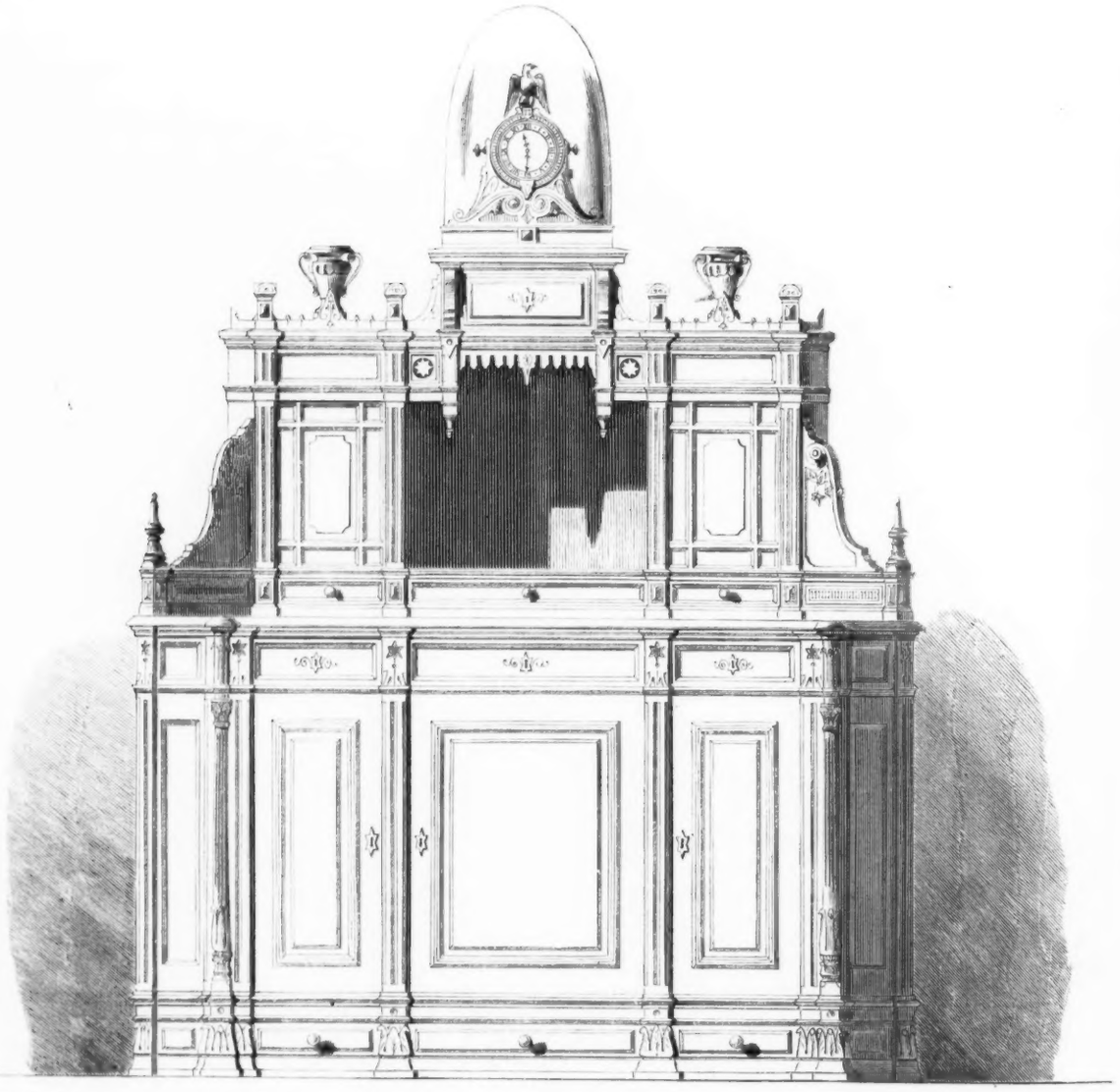
No. 18.

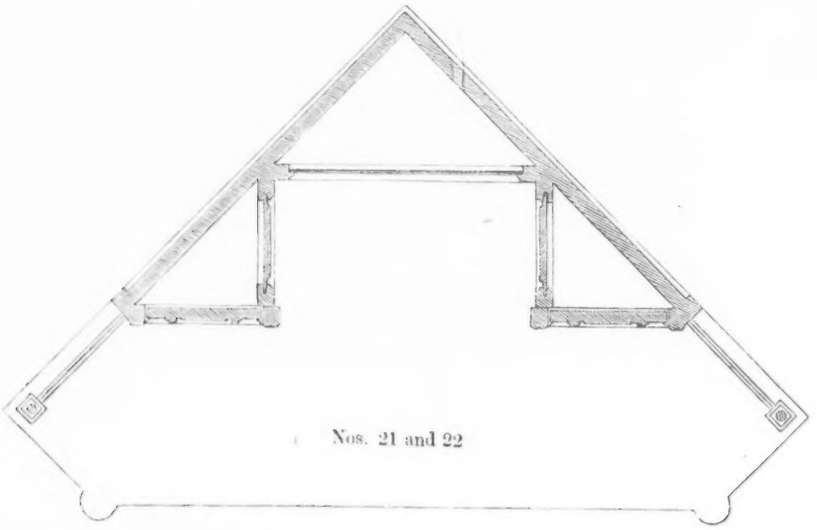
Nos. 16, 17 and 18. Sepulchral Stone for a physician: the monument, worked in sandstone, shows a marble medallion in the upper part. Mr. Dollinger, Archt.

Nos. 19 and 20. Bedstead, designed in the style of early Italian Renaissance; the ornamental framework in light yellow wood with black inlay in imitation of the marquetry of the fiveteenth and sixteenth centuries; the panels in dark-brown wood, centre medallions, roses, and frieze of cornice, dark-brown with light design, carvings being also light brown. — For details see N. 1 of Supplement.



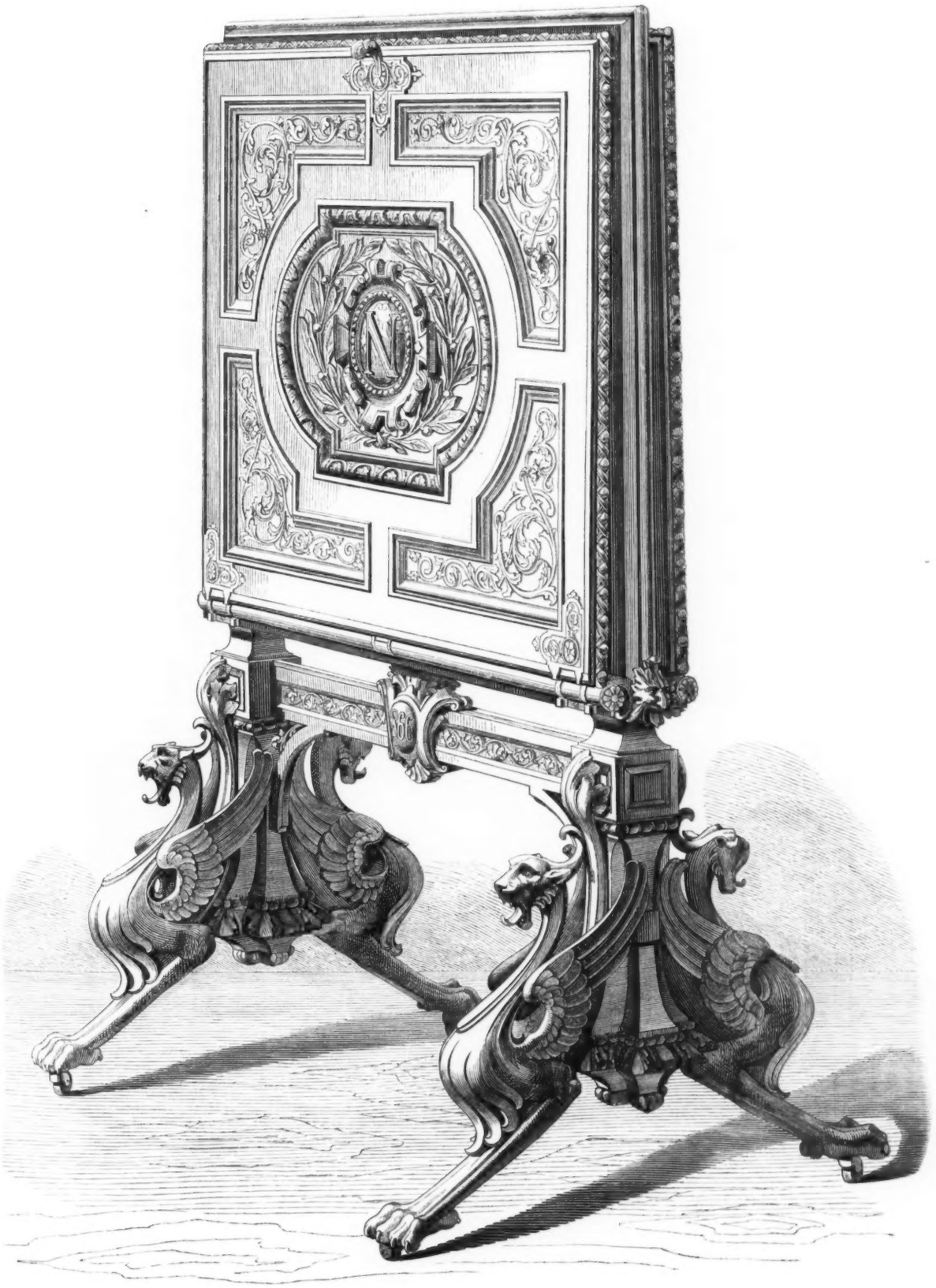
Nos. 19 and 20. Bedstead. (For descriptive notice see p. 170.)



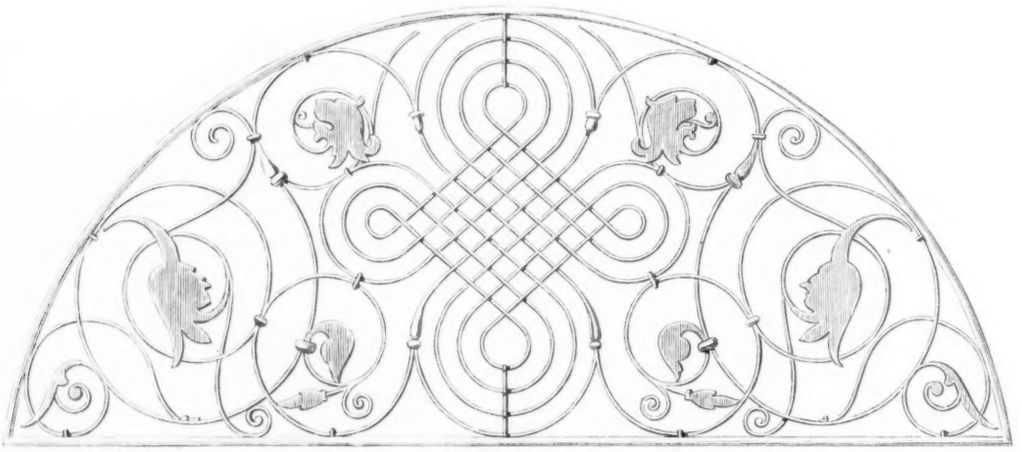


Nos. 21 and 22

Nos. 21 and 22. Triangular Side-board in polished oak, astragals, chamfers, and ornaments, stained black. — For details see No. 4 of Supplement.



No. 23. Portfolio-stand for drawings and engravings.



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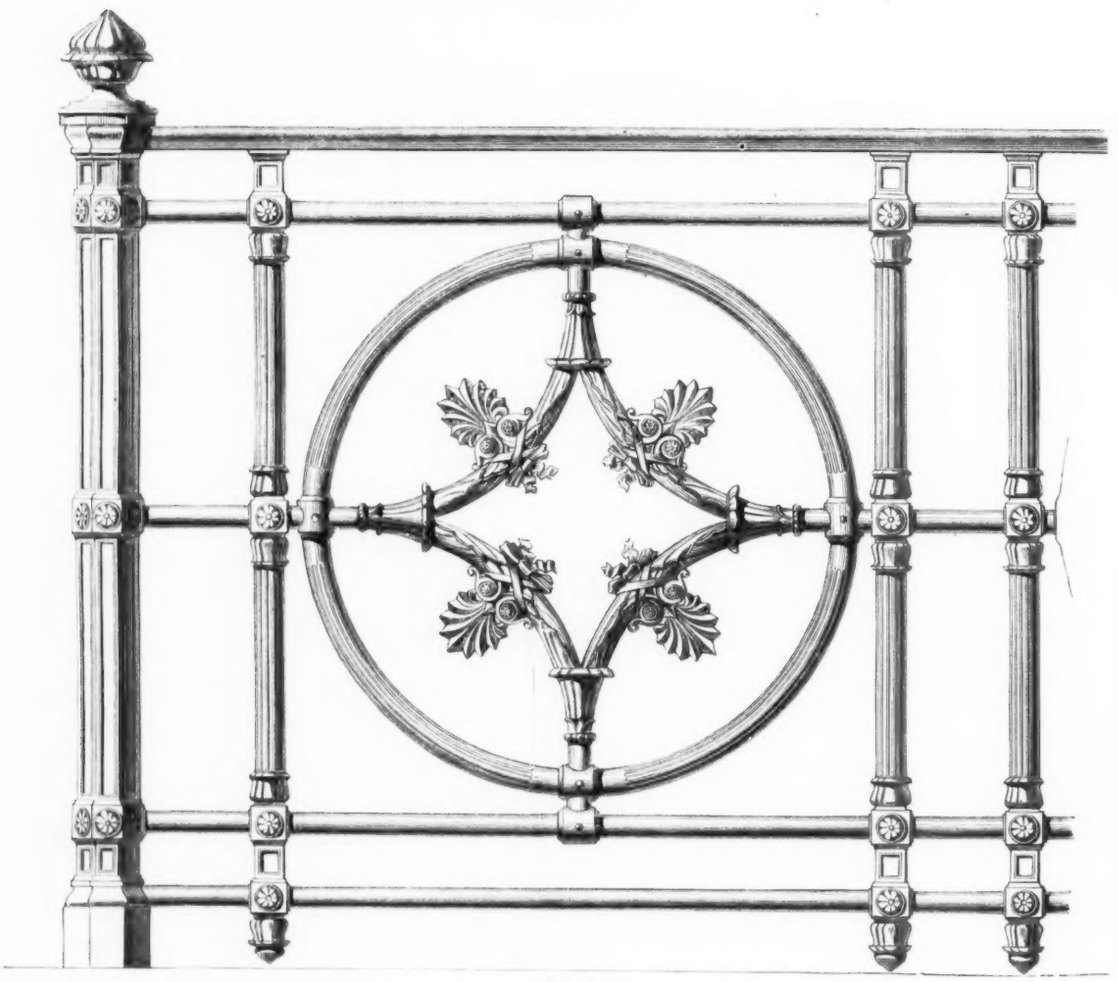


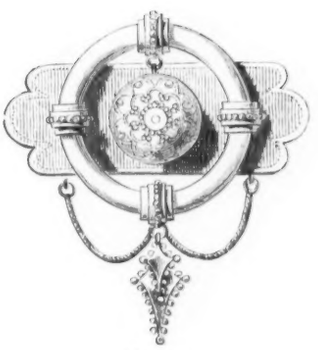
No. 25.

No. 24. Wrought-iron Grille for upper part of a house-door in Prague. Seventeenth century.

No. 25. Cast-iron Balustrade of the new Railway-bridge Mannheim-Ludwigshafen. Mr. Richard. Archt.

No. 26.

No. 27.

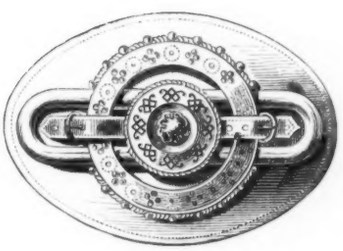


No. 28.

No. 30.

No. 33.

No. 31.

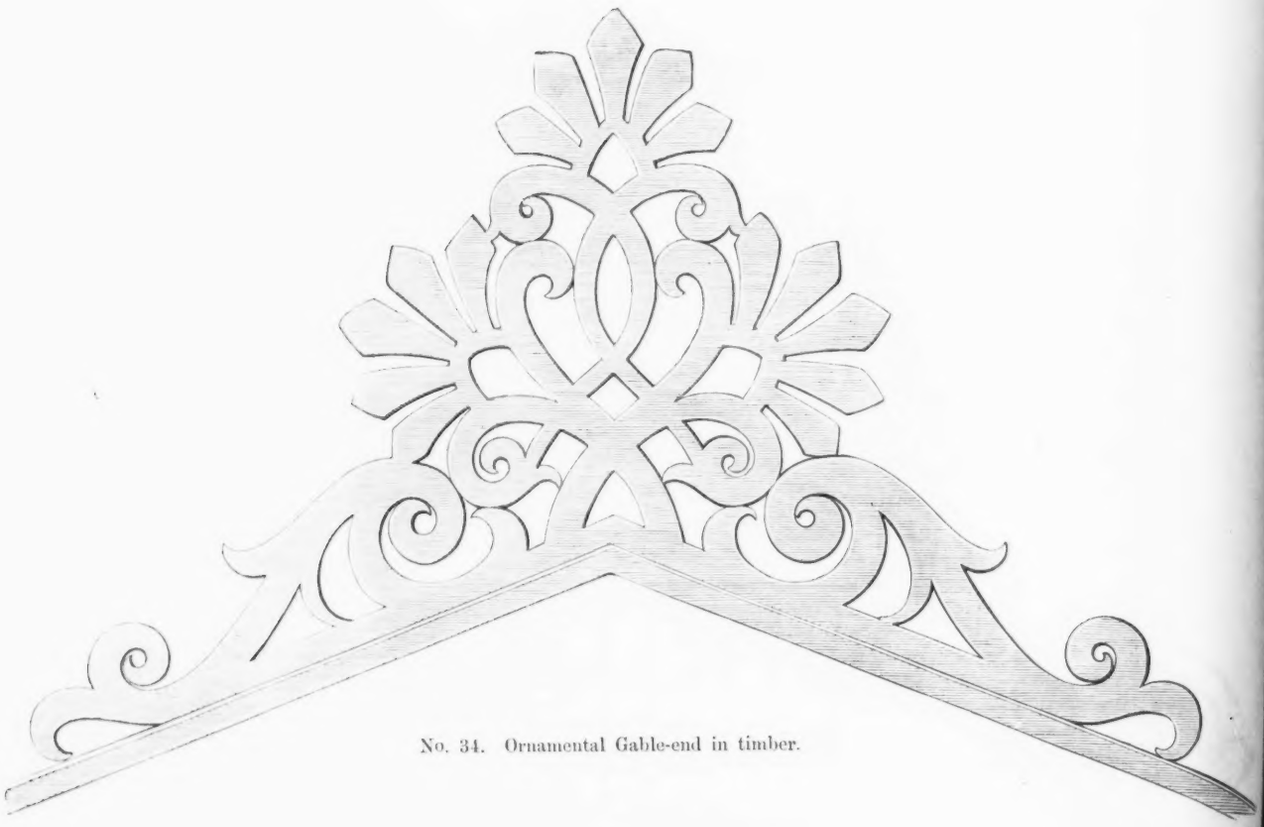


No. 29.

No. 32.

No. 26. Modern Vase.

Nos. 27—33. Modern Jewellery; three brooches and four ear-pedants with pearls, precious stones, and enamels; manufactured by Mr. G. Ehni, Stuttgart, for export into Havannah and Mexico.



No. 34. Ornamental Gable-end in timber.

VARIOUS.

The Holy Sepulchre.

The works for the reconstruction of the cupola of the Holy Sepulchre, wich have been carried on with extreme rapidity, appear to be approaching their termination. At the end of last year the iron ribs were completed, and the lantern placed on the summit. An idea could then be formed of the elegant proportions of the new dome. The previous edifice, being too flat, had a heavy appearance. The present cupola, being about 6 ft. higher, and surmonted with a cross, rises more conspicuously above the surrounding buildings.

The Kinescope, a New Photographical Bijou.

M. M. Langlois and Angiers of No. 14, Rue de Castiglione, Paris, have constructed a clever little apparatus, to which they have given the name of Kinescope, showing objects in relief and in motion. To show them in relief does not require couples of dissymmetric photographs, as those used in this apparatus are microscopic, and each of the photographs is separately shown in relief. The movement consists only of two different positions of the subject, the first and the last, without passing through the intermediate positions, so that two images only are necessary. The apparatus, thus amazingly simplified, is contained in a small oval locket, the greatest length being abut $^{7}/_{8}$ in., and the two photomicroscopic cylinders are placed in the centre of and perpendicular to the face of the breloque. They represent the same object in two positions, and the effect of change of position is obtained by a very simple mechanism. The two photomicroscopic cylinders are placed in a vertical guide, surrounded by an india-rubber membrane; on which rests a vertical pin, terminated by a small button on the top of the locket. For instance, in the locket we examined, on looking through the central aperture, the normal state of the apparatus shows a little child holding in its outstretched hand an india-rubber ball, which he contemplates with evident pleasure, the head being bent towards it.

But, if the button be pressed down with the finger. the force exerted on the caoutchouc changes the relative position of the cylinders, and the first image dissapearing, the second image is brought to view, showing the ball thrown up into the air, while the head is thrown back to watch the movement of the projectile. If the motion of the finger be rapid enough, the images succeed each other instantaneously; and, owing to the persistance of images on the retina, the illusion of the child tossing up the ball is perfect. Thus, by this very ingenious idea can be produced the effect of a distant or departed friend appearing full of life.

The Builder.

Electro-Iron Deposits.

The *Scientific Review* discusses at considerable lenght the new scheme of producing, or rather depositing, iron by electricity, which has occupied the attention of French and German experimenters for several months.

There is a great desire to keep it a secret; but the process is supposed to be analogous to the electrotype. The iron so produced is not nitrogenous, but pure. It will withstand the action of hydrochloric acid or sulphuric acid in the cold, and will, therefore, not rust in the open air. It is of a clear grey color, and takes a fine polish. With a weak current of a single Daniell cell, iron two millimimèters thick is easily deposited in a fortnight.

BRITISH
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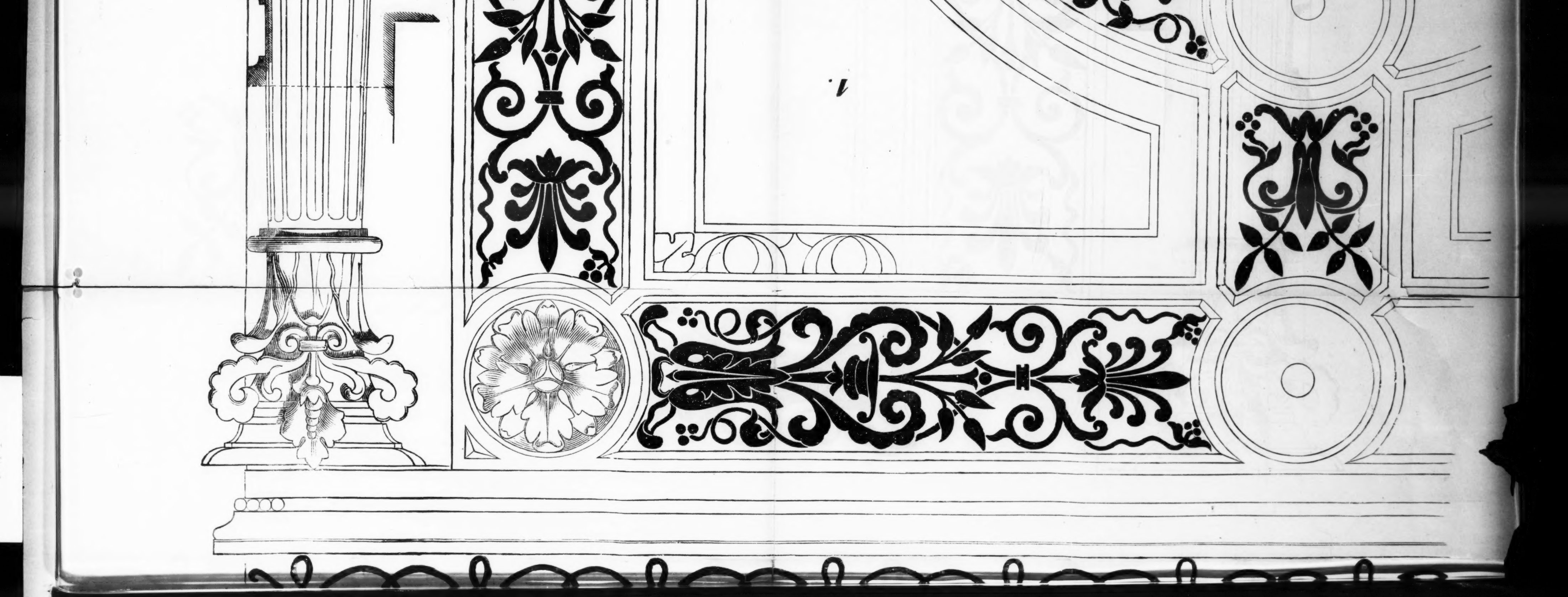
MUSEUM

1.

No. 11.

THE WORKSHOP.



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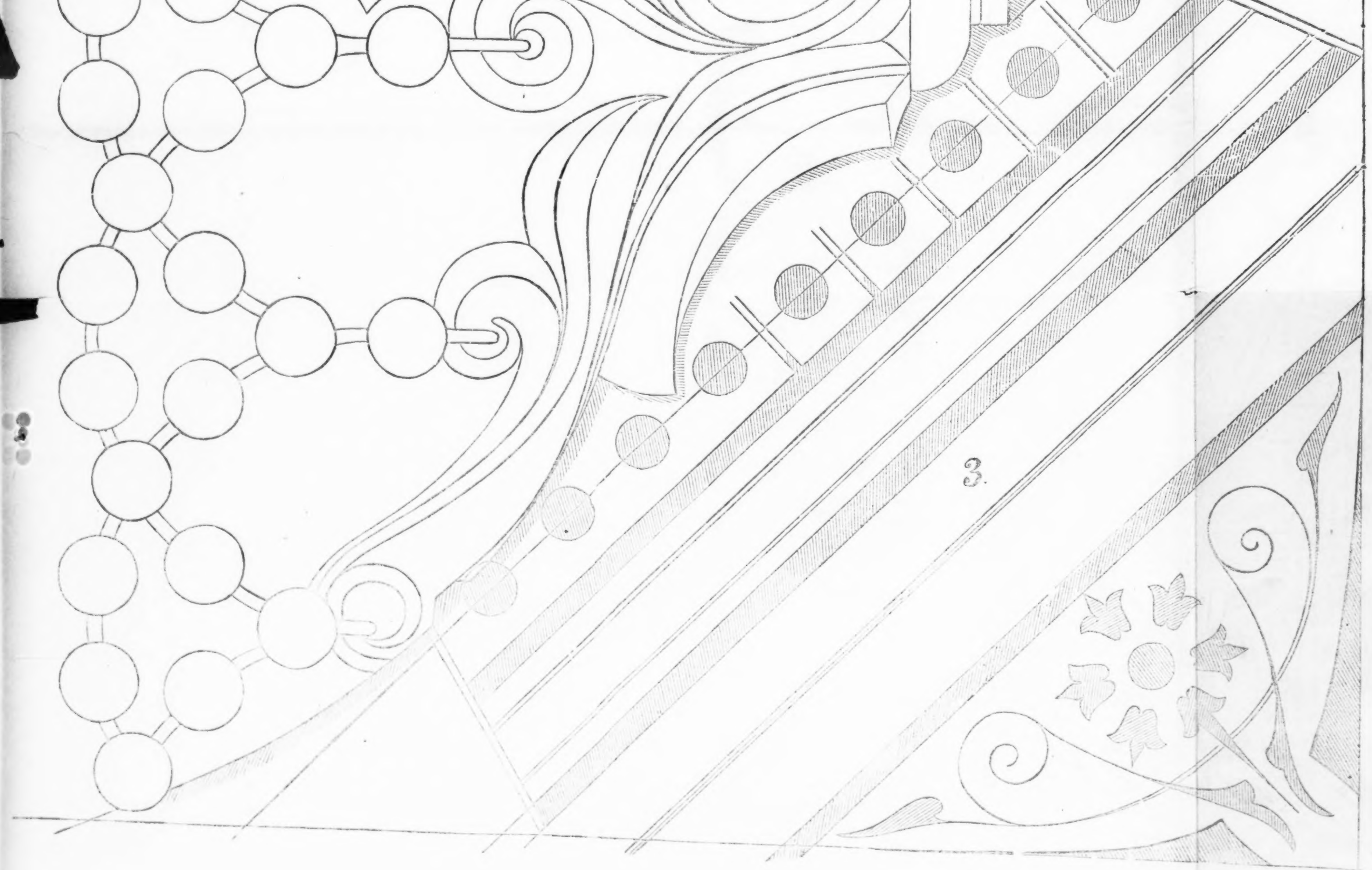

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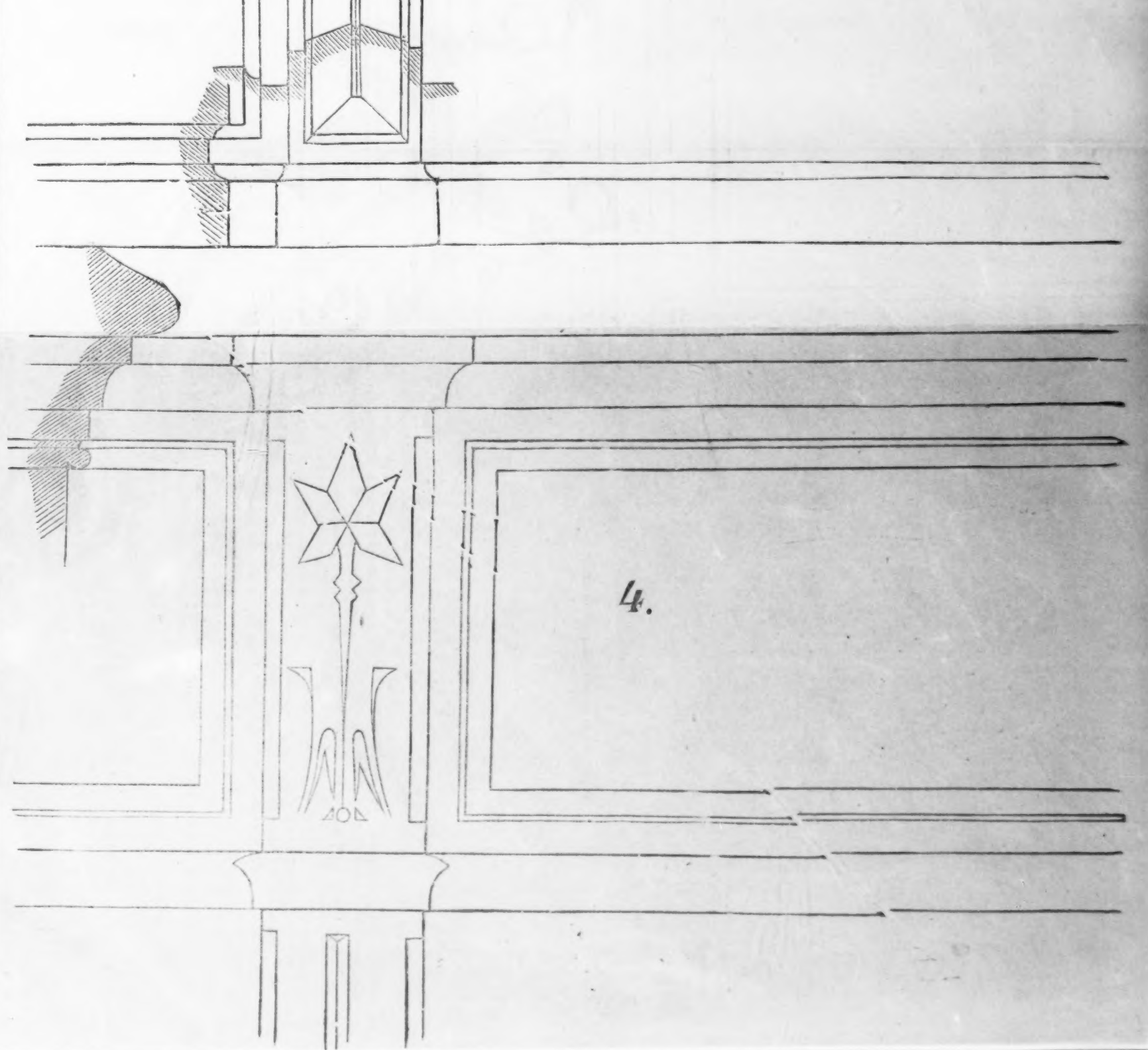

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